



# **RECOVERING** **& REDISCOVERING** **A RESOURCE**

## **RECOVERED OFFICE PAPER:**

OPENING THE DOOR TO CLIMATE PROTECTION,  
GREEN JOBS, AND A SUSTAINABLE PAPER INDUSTRY



# table of contents

- 3**    **Summary** – Join the Effort to Improve North America’s Paper Recycling
- 5**    **Introduction** – Office Paper is a Valuable Resource

## **Part One – Laying the Groundwork**

- 7**    **Chapter 1** – Understanding Your Current Waste Management Practices
- 9**    **Chapter 2** – Analyzing Your Solid Waste Stream
- 11** **Chapter 3** – Gauging Interest from Your Tenants
- 12** **Chapter 4** – Researching Your City’s Recycling Infrastructure
- 13** **Chapter 5** – Researching Available Resources for Recycling

## **Part Two – Implementing your Paper Recycling Program**

- 14** **Chapter 6** – Designing the Best Paper Recycling Program for Your Office
- 16** **Chapter 7** – Engaging Your Tenants
- 18** **Chapter 8** – Engaging Your Janitors
- 20** **Chapter 9** – Working with Haulers and Paper Brokers
- 24** **Chapter 10** – Shredding Your Paper Only when Necessary

## **Part Three – Resources and Tips on Paper Recycling**

- 25** **Chapter 11** – Networking within Your City and Region
- 27** **Chapter 12** – Reimagining Paper in the 21st Century
- 29** **Chapter 13** – About the RePaper Project
- 30** **Chapter 14** – Notes and Resources

# summary

## JOIN THE EFFORT TO IMPROVE NORTH AMERICA'S PAPER RECYCLING!

We need office and building managers everywhere to set up effective paper recycling programs in their offices. This means recovering all paper after it's used, keeping the office paper clean and separate from other paper types, and ensuring that this paper, once it leaves the office, is on its way to a high-grade deinking mill. The mill will then supply our recycled paper manufacturers with the material necessary to create high-quality recycled office paper.

Paper is a necessary resource for business and personal use. We use it every day. We touch it multiple times in an hour. It's so ingrained in our lives that we don't even think about it anymore, least of all when it is discarded. However, the way we dispose of paper can have dramatic impacts on the climate, jobs, and the paper industry.

As an office manager, you use high-quality paper frequently - probably more frequently than the majority of other professionals - making you a key driver in the effort to stop climate change, preserve forests, create jobs, and sustain our domestic paper industry. Therefore, office and building managers are the RePaper Project's prime audience. You play a critical role in the recycled paper cycle that begins with a healthy supply of recovered paper.

The more office managers understand the virtues of recycled paper and the needs of our domestic recycled paper manufacturers, the more likely office recycling programs will succeed in supplying our manufacturers with the material necessary to produce quality office paper.

**Today in the United States only 50% of office paper is recovered for recycling.** Most of the rest is lost to landfills or incinerators. This is a shame, because as paper decomposes in a landfill, it releases methane, a climate warming gas 25 times more harmful than carbon dioxide. If it is burned, it still releases CO<sub>2</sub>. This is not only a significant waste of a valuable resource, it is drastically adding to our global pollution problem, especially since **U.S. municipal landfills are composed of over one-quarter paper.**

Office paper as a raw material is vital for producing high-quality recycled paper. Indeed, the primary paper that can go back into making office paper is – you guessed it - office and printing paper! In fact, the recycled paper industry creates five times as many jobs as the virgin paper industry – where paper is made from forests instead of paper. So by boosting the recovery rate of office paper, you are not only supplying the necessary feedstock to support a less energy-intensive manufacturing process, you are also creating green, sustainable jobs in your community.

Not only is it important to recover a much higher percentage of office paper for the reasons mentioned above, it is also necessary to be able to increase the recycled content of office papers. In North America, printing and writing papers only contain an average of 6% recycled content. The other 94% comes from virgin forests. This is unacceptable, especially in a world where the technology is available and sustainability a must. Why only 6%? Some of it has to do with the low 50% recovery rate of office paper. On top of that, much of the office paper that is recovered for recycling becomes contaminated when office paper is not kept clean and separate. Once office paper has been mixed with newspapers, cardboard, packaging, paper bags, etc., it can no longer go back into making office paper, because these other types of paper do not have strong enough fibers to manufacture office and printing papers.

Another reason why we have only 6% recycled content in our printing and writing papers is that our domestic deinking plants are running near maximum capacity. Before they expand their capacity, the industry needs to be convinced that there will be a vast increase in a clean and uncontaminated supply of high-grade recovered paper – namely office paper.

For all of the reasons offered above, office managers across North America play a pivotal role in supporting and expanding our recycled paper manufacturing industry and protecting our planet.

The RePaper Project is a resource for office managers seeking to improve or start a paper recycling program. This guide is a first step, providing both a big picture context for why an effective program is important and practical suggestions for making it a reality.



## DEFINITIONS

### DEINKING:

The process by which ink is lifted off used paper, which is then broken back down into fibers to be recycled into new paper.

### HIGH GRADE DEINKING MILL:

A high-grade deinking mill turns inked printing and writing paper into the clean recycled fiber that is then suitable to make recycled printing and writing papers, as well as recycled-content tissue products.

### OFFICE PAPER:

High grade papers such as copier paper, computer printout, and stationary almost entirely made of uncoated chemical pulp. Such paper is also generated in homes, schools, and elsewhere, along with offices.

### PRINTING AND WRITING PAPER:

Suitable for printing, copying, and business purposes, writing, sketching, drawing, etc. except newsprint.

Because every region has different recycling systems, and every building has different management needs, this guide will not cover every aspect that office managers might be dealing with in your paper recycling programs. Therefore, a webpage on the RePaper Project site, [www.repaperproject.org](http://www.repaperproject.org), is being created to respond to feedback that office managers provide, allowing us to better serve the majority of managers in as many situations as possible. This page will be updated regularly with Frequently Asked Questions, Troubleshooting tips, and Case Studies.

# introduction

## OFFICE PAPER IS A VALUABLE RESOURCE

Paper is not trash. It's a resource. Once this is understood, the need for recycling paper becomes unquestionable.

Recycling paper is a value-added act to our society – it saves a huge volume of natural resources, which in turn saves money, protects the climate, and improves our environment. Recycling paper provides the essential material to domestic manufacturers, which in turn creates jobs and supports an industry. And it saves space in our city landfills, which in turn also saves money and reduces climate pollution. Over one-quarter of the waste in municipal landfills consists of paper, and as paper decomposes, it releases methane, a climate warming gas that is 25 times more powerful than CO<sub>2</sub>!

Why, then, do we throw paper in the trash? It's really the same as throwing money away. But unfortunately, the waste system has been set up to support "throwing away", rather than recycling or reusing. Therefore, a strong paper recycling effort is needed. Paper is a valuable commodity in today's and tomorrow's world. If paper is collected properly, it can successfully supply our domestic

paper manufacturers with the feedstock they need to make a better recycled paper product for your office.

In reality, however, only 50% of office paper in the United States is collected for recycling. If we are to make progress in protecting our environment and encouraging sustainable growth for our industries, more office paper must be recycled. The RePaper Project is setting a goal of recovering 75% of office paper by 2015, which is in-line with what European countries are now recovering.

Before discussing the best practices for implementing an office paper recycling program in your office or building, it is important to understand the goals of a collection program, and ultimately why you should be collecting office paper for recycling. There are three basic and interrelated reasons for having a paper collection program:

- 1. Good for the economy**
- 2. Good for the climate**
- 3. Good for the paper industry**

### GOOD FOR THE ECONOMY

Recycling paper creates jobs in your community. The recycled paper industry creates 5 times more jobs than the virgin paper industry.

Recycling paper means less trash for your building/office, which means reduced trash pick-up costs and reduced space needed for trash storage.

Moving toward better resource management through recycling will help secure our economic future.

one.

### GOOD FOR THE CLIMATE

Recycling paper protects forest ecosystems, that not only filter pollution and carbon from the atmosphere, but also store vast amounts of carbon.

Landfilling paper produces methane during paper decomposition, a gas 25 times more harmful than CO<sub>2</sub>.

Manufacturing recycled paper uses 44% less energy and creates less pollution than manufacturing virgin paper.

two.

### GOOD FOR THE PAPER INDUSTRY

Recycling paper supplies our domestic industry with critical raw material to manufacture recycled paper.

Manufacturing high-quality recycled paper improves a paper company's image and product placement.

By having access to vast amounts of high-quality recovered paper, a paper company's profit margins will improve.

three.

## HOW TO USE THIS MANUAL

This online resource brings you, as a building or office manager, into the world of recycled paper and makes you aware of opportunities to cut waste and disposal costs and maximize your recovered paper. So often, how-to guides only provide a bare-boned breakdown of how to accomplish a goal. But they don't address the "why" nor explain the entire system you're plugging into. This how-to guide compiles the basic steps of setting up a successful paper recycling program, but also covers other topics that today's office and building managers are dealing with, while explaining how you fit into the overall system of recycled paper manufacturing.

By no means will this guide answer every question, as all office buildings are managed differently, and no region is the same in regards to paper recycling infrastructure. Therefore, this is not an end-all, be-all guide.

However, to help address the nuances of differing situations, we'll also have a webpage at [www.repaperproject.org](http://www.repaperproject.org). This page will be updated periodically with helpful strategies, tools and resources. It will also be a clearinghouse for out-of-the-box ideas for creating a successful recycling program in your building or office, drawing from the experiences of office and building managers across the country. Please check back to this site often!

### Virgin vs. Recycled Paper Comparisons

| Impact Category  | 1 Ton Virgin Paper                    | 1 Ton 100% Recycled Content           | % Reduction by using Recycled       |
|------------------|---------------------------------------|---------------------------------------|-------------------------------------|
| Wood Use         | 3 tons                                | 0 tons                                | 100% less wood use                  |
| Total Energy     | 38 million BTU's                      | 22 million BTU's                      | 43% less energy use                 |
| Greenhouse Gases | 5,690 lbs. CO <sub>2</sub> equivalent | 3,582 lbs. CO <sub>2</sub> equivalent | 37% less CO <sub>2</sub> equivalent |
| Wastewater       | 19,075 gallons                        | 10,325 gallons                        | 45% less wastewater                 |
| Solid Waste      | 2,278 pounds                          | 1,155 pounds                          | 50% less solid waste                |

Source: [Environmental Defense Paper Calculator 2.0](#)

# PART ONE

## LAYING THE GROUNDWORK

# Chapter 1:

### GOAL OF SECTION:

Help guide you through the initial “research and discovery” needed to ultimately implement an effective and efficient paper recycling program.

## UNDERSTANDING YOUR CURRENT WASTE MANAGEMENT PRACTICES



### GOAL OF THE CHAPTER:

Assist you in thinking through your waste management structure to design a recycling program that recovers all the paper in your office, keeps your office paper separate from other paper grades, and ensures your paper will ultimately become high-quality, recycled office paper.

**You should ask a series of questions to help you in this process:**

- Who is responsible for collecting solid waste in your building—a janitorial staff, a contracted firm, your tenants, or someone else?
- If using a janitorial staff or service, how often do they collect waste from each office/unit?
- Does the building or any tenants have any kind of recycling program already in place?
- If so, what materials get collected?
- When does trash (and recycling, if applicable) get picked up by a trash hauler?
- Who is responsible for picking up solid waste—you, the city, the county?
- When is your trash and/or recycling contract(s) up for renewal?
- Is it possible to renegotiate the terms of your current contract?

### Understanding Current Waste Management Practices

First, you should try to fully understand how your building manages solid waste. Depending on what you discover, you may only need to implement minor changes to maximize the recycling potential of your solid waste stream, or you may find out that you need to create an entire program from scratch.

Your answers to these questions will dictate your collection strategies moving forward.

The nature of a paper recycling program will largely depend mainly on who collects solid waste in your building. If each tenant is responsible for collecting solid waste and bringing it to a central dumpster, for example, you are going to need to focus your strategy on getting each tenant to adopt a paper recycling program, or you could change practices and decide to hire janitorial staff or a janitorial service to handle collection. If you have janitorial staff, you are going to need to train them to assist with the program design and execution. If you have a janitorial service, you are likely going to need to renegotiate the terms of your contract in order to include recycling collection.

Understanding what kind of recycling programs, if any, exist in your building is important, because the steps needed to maximize performance of an existing recycling program are likely to be different than the steps needed to start a brand new one. If tenants already collect recyclable paper, but paper products are mixed, then your goal might be to focus on getting people to separate paper types when they recycle. If collection practices are being optimized, you might focus on improving the marketing strategy for the collected materials. You should build on what already exists, rather than scrap an existing program and start from scratch.

The steps you need to take will also depend on who picks up recycling and trash and how often. If your garbage hauler comes by several times a week, while your recycling hauler comes by less frequently, you might need more space to store recyclables if you plan on expanding the recycling program. This information will also be helpful in your next step, when you conduct a waste audit.

## TIPS FROM CHICAGO RECYCLING COALITION

**It is possible that the private waste hauler picking up garbage from your building can provide source-separated collection of recyclables for an additional cost.**

**There may be a few local companies and organizations that specialize in providing source-separated collection of recyclable commodities.**

**Remember that although recycling may cost money to establish (to pay for recycling containers), an effective program will save money in the long run. If you reduce your waste through recycling, you can reduce your waste disposal costs. Considering how much paper is thrown out in most office buildings, diverting this paper through recycling can add up to a huge cost reduction.**

**It pays to call around and get several quotes. Because office buildings generate so much clean paper, some service providers may even do pick-ups for free.**

**Think about your building's storage capacity and waste volume before speaking with recycling service providers. For example, does your building have a dock? How much alley space is available for totes or metal yard-boxes?**

**Recycling service providers should provide dumpsters, totes, or containers for storing recyclables prior to collection. Think about the workflow of custodial staff, as they will bring recyclables to this location.**

**Some recycling service providers might also provide educational materials and/or recycling containers for inside the office building**

**Source: [Chicago Recycling Coalition](#)**



# Chapter 2:

## ANALYZING YOUR SOLID WASTE STREAM



### GOAL OF THE CHAPTER:

Walk through one possible way doing a “waste audit” to better understand how much paper you are throwing away, how much you could be recovering, as well as estimating cost savings through reduced trash services.

not already in place, pick a day in the middle of the week to conduct the analysis, when the trash collected will be typical of what your building’s waste stream would look like. If a recycling program is in place, try conducting the analysis a day or two after the recycling is collected. When doing the analysis, look at both the recovered paper and waste that accumulated during that time so that you can get a total picture of waste produced in the building.

If your office building already has some kind of recycling program, collect all of the recovered paper that accumulated one day after pick-up. Also collect all of the trash accumulated during that same time. Once you have collected all the material that you

### Performing a Waste Audit

Once you understand the system through which solid waste is collected and picked up, the next step is to analyze your building’s solid waste streams. This will help you measure the success of a recycling program, estimate the amount of paper that can be removed from the waste stream and collected for recycling, and identify priorities for your program. The following will help you effectively conduct a waste audit for your office or building.

In order to get the most accurate picture of your building’s waste stream, it is important to choose a timeframe that will be most representative of the average amount of waste produced by your building over the course of a year. For example, if your office building hosts many accounting firms, you may not want to conduct the waste audit during tax season. Nor would you want to conduct a waste audit during the week between Christmas and New Year, when many offices are closed. If a recycling program is



### tip:

There are a number of ways to do a waste audit – you do not need to do it yourself! You may be able to arrange for a commercial recycling program in your city to conduct the audit. Often times, waste haulers offer waste auditing services. Keep this in mind if you do not have the time or resources to conduct the waste audit yourself, but would like to complete one for your office or building.

are going to analyze, bring it to your sorting area. Next, sort the recovered paper into different product categories, as follows:

## Paper Products

- Office Paper
- Colored Paper
- Newsprint
- Cardboard
- Magazines/Catalogues

It is adequate to just visually estimate how much paper you are recovering. Set up a form to fill in the estimates of each of these paper grades, keeping products collected from recycling containers separate in this analysis from products collected in the trash bins.

If you do not have a recycling program in place, try to recover all the paper from the trash, and separate it into the categories listed above.

Once you do this, you can use the estimated amounts to figure out how much of each product would accumulate over a one- or two-week period (or however long it is between trash pick-ups). If you already have a recycling program, this can also give you an idea of what level of participation already exists. If you find that despite having collection bins for paper, many people are throwing paper in the trash, it is important to identify that issue as an area for improvement.

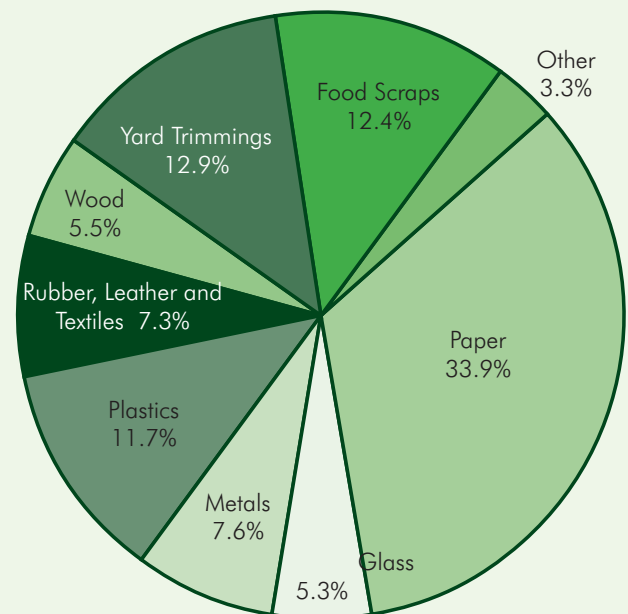
By doing a waste audit, you can then conceptualize the amount of paper you will be recovering with a paper recycling program, and therefore, how much less space you will need for trash. From here, you could estimate cost savings from reduced trash equipment and services.



A simple and clear website to help you determine if you would like to perform a waste audit for your office or building is the [Government of Barbados](#). This site walks through the steps involved in conducting a waste audit in your office or building, and provides forms and resources to help track and record your findings.

## TOTAL MSW GENERATION (BY MATERIAL), 2006

### 251 MILLION TONS (BEFORE RECYCLING)



Source: US EPA, [Municipal Solid Waste Generation, Recycling, and Disposal in the United States: Facts and Figures for 2006](#).

# Chapter 3:

## GAUGING INTEREST FROM YOUR TENANTS



### GOAL OF THE CHAPTER:

Help you determine current tenant support for recycling to more effectively increase recycling participation.

### Tenant Surveys

Once you have a handle on both what your existing waste management practices are and on the composition of your building's solid waste, you should then get an idea of what kind of interest there is in your building for recycling. This can be done through several methods, both formal and informal.

The data you receive from your tenants will give you valuable information about how to proceed with your paper recycling program.

If there is a high degree of enthusiasm for recycling in your building, you can have confidence that once the recycling program is offered, people will participate in it, and you will be able to achieve high collection rates of paper. However, if there is very low enthusiasm, you may need to focus energy on educating tenants of the benefits of recycling or, more extremely, research and develop mechanisms that will enable you to promote participation by setting waste limits, or some other tool.

### YOU COULD CONDUCT A SURVEY, ASKING QUESTIONS SUCH AS:

- How far would you be willing to walk to recycle a product?
- [If you already have a recycling program] How often do you recycle your paper in the office—Always, Most of the Time, Some of the Time, or Never?
- If your office established a recycling program or expanded an existing program, how likely would you be to recycle most or all of the time—Very Likely, Somewhat Likely, Not Very Likely?
- How would having a successful recycling program make you feel about working in the office—much more positive, somewhat more positive, no effect, somewhat more negative, much more negative?
- How much money would you be willing to pay on a (weekly/monthly) basis to support the building's recycling program?

# Chapter 4:

## RESEARCHING YOUR CITY'S RECYCLING INFRASTRUCTURE



### GOAL OF THE CHAPTER:

Provide greater understanding of where your recovered office paper goes after it leaves your building, to ensure it is en route to becoming recycled office paper.

### MRFs, Waste Haulers, and Paper Brokers

By now you should have a pretty good idea of how your building handles solid waste, what the composition of that solid waste is, and what kind of attitudes your tenants have towards recycling. Next on your list should be to research local recycling infrastructure.

Ideally, you want to make sure your recovered office paper goes to the high-grade deinking mills so that it can be used to manufacture more office paper. In some instances, you can market your paper directly to paper brokers, who then sell to the deinking mills. This scenario is highly desirable for several reasons. Not only will you be avoiding the disposal cost of the paper, you will be gaining revenue from selling it. So ideally, you would hope to identify a paper broker in your area that specializes in purchasing sorted office fiber for high-grade deinking mills. ([Contact the RePaper Project](#) to help you in identifying a paper broker near you.)

However, this ideal scenario is not always possible! Most likely, you will be working with a waste hauler company, who picks up your recovered paper, and takes it to the local Material Recovery Facility (MRF). The MRFs then market and sell the paper that is being sent to them. In this case, you want to ensure that your waste hauler does indeed deliver to a MRF that will keep office paper sorted (not mixed with other grades of recovered paper), and then market to paper brokers that specialize in buying recovered office paper. Keeping high value office paper segregated from other grades of recovered paper will ensure that it is delivered to a deinking facility that supplies high-grade recovered fiber to recycled paper mills.



### tip:

Recycling resources, collection methods, and policies are different from city to city and region to region. It will benefit you greatly to look into your city or county recycling ordinances. These are located many times online at the city website or can be attained with just a phone call to your Sanitation/Solid Waste Department.

If you determine that your current waste hauler does deliver to a MRF that keeps office paper separate, then you are heading in the right direction. However, if you find that your waste hauler does not engage in keeping office paper separate, you will want to find a hauler that will support your program, or else identify a way to market your paper directly to a paper broker. There is more information on these topics in Part Two of this guide.

# Chapter 5:

## RESEARCHING AVAILABLE RESOURCES FOR RECYCLING



### GOAL OF THE CHAPTER:

Provide tips for seeking resources and support for office paper recycling in your city and region.

### Resources for Recycling Programs

Research is key to finding hidden resources for setting up or improving an office or building recycling program. Some cities will offer grants to building owners or office managers that are exploring ways to green their technologies, infrastructure, and ways of doing business. However, these grants are not always clearly advertised, so ask other office managers, your city council members, municipal staff, city and regional environmental organizations and agencies, as well as local recycling advocate organizations about

what available resources or opportunities exist. They will become your allies in finding necessary resources to make “green” changes in your office.

### Tips for Finding Available Resources

- Contact other office managers in your city – ask about resources they are aware of and are using themselves
- Call your city’s Recycling or Sustainability Office, which might be located in the Department of Public Works, Solid Waste or Sanitation Department
- Call your regional EPA office – ask about commercial recycling grants or resources available to your region
- Call your statewide, or citywide recycling or environmental organizations and ask about resources available
- Contact your regional BOMA office – they may have information available on potential resources for your office
- Do an internet web search for recycling in your city – you may pull up some very helpful sites!

### FUNDING SOURCES:

#### StopWaste Mini-Grants for Businesses and Public Agencies

Alameda County, located in the San Francisco Bay Area, relies on its county-wide government agency, StopWaste.org, to work towards achieving a 75% and beyond waste diversion goal and promoting sustainable consumption and disposal patterns.

The StopWaste Mini-Grants program offers businesses and public agencies grants ranging from \$500 to \$5,000 to support program start-ups that promote waste prevention, reuse, recycling or market development. Funds are often used to purchase recycling containers or

conduct educational programs for employees and custodians.

Based on many years of the success of StopWaste’s Mini-Grants in stimulating more business recycling, San Francisco initiated a similar program. The San Francisco Commercial Recycling Mini-Grant Program awards up to \$10,000 for equipment purchases such as compactors and balers that can significantly increase a building’s recycling rate.

King County, WA (Seattle) gives up to \$500 for Green Team projects at schools, which can include recycling. Governments in your area may offer similar programs.

For more information, click on [StopWaste](#) or [San Francisco businesses or King County, WA \(Seattle\)](#).

# PART TWO

## IMPLEMENTING YOUR PAPER RECYCLING PROGRAM

**GOAL OF SECTION: TO  
HELP GUIDE YOU THROUGH THE STEPS  
TO CREATE OR IMPROVE A SUCCESSFUL  
OFFICE PAPER RECYCLING PROGRAM.**

# Chapter 6:

## DESIGNING THE BEST PAPER RECYCLING PROGRAM FOR YOUR OFFICE



### GOAL OF THE CHAPTER:

Identify important steps for setting up an efficient and successful paper recycling program for your office or building.

- Being able to measure the success of the program is important so you can update tenants, and others, on your progress
- Creating a money savings analysis from your collected paper will inspire everyone involved
- Keeping people informed and educated about the program on an on-going basis is critical to engage your tenants

### Recovered Paper is an Important Resource

One of the main themes of this guide is that recyclables are resources, not garbage. Recycling collection programs are often set up as an afterthought to garbage collection programs; ideally, the reverse would be true. We should only landfill what we cannot reuse or recycle, both for the sake of the environment and cost savings.

Because this guide is focusing on paper collection, it is important to understand the value of paper. Recovered office paper brings in top dollar, because it is a primary ingredient in recycled printing and writing paper. Unfortunately, printing and writing paper only contains, on average, 6% recycled content in North

### Office Paper Recovery

Every building is unique, so programs need to be modified to fit with each building's individual needs and requirements. Design your program for your particular building, needs and requirements, and you will be set up for success.

Once you've laid the initial groundwork, you will be prepared to design your program. Keep the following tips in mind as you design it:

- Ease of use is key to getting tenants to participate and stay involved in the program



America. To increase that percentage, we need to increase the amount of recovered fiber available for the deinking process. There is no good reason we shouldn't make this a reality. Recycled office paper is of equal quality as virgin office paper. It has the same brightness, thickness, and weight. It can be used in any of today's printers and copiers. So, we need to drastically increase the collection of office paper in order to ensure we can boost the 6% recycled content to 15% by 2015 and 30% by 2020.

## Suggestions

The following suggestions are to be used as ideas to help design your paper recycling program, not necessarily "must haves".

The only "must" in a good paper recycling program is the first one – keep your recovered office paper separate from other grades of paper!

### Separate Office Paper

When setting up your recycling program, design your collection bins to keep office paper separate from other paper. This will give you a valuable supply that you can then potentially market to high-grade paper buyers.

### Create Incentives for your Tenants

Everybody loves to be rewarded and noticed for their work and commitment to a task. As an office or building manager, you can make this happen in your recycling program.

### Create Educational Forums/ Networks for your Tenants

When you keep people connected to a program, it becomes easier to create success. Networks or forums enable you as a manager to keep the issue fresh and in front of the people you need to be involved in your program: your tenants. You can also reward good team players through the network or forum. Keeping the issue alive for the participants is one key to a successful paper recycling program.

## Create Competitions or Events

Everyone loves a fun and engaging challenge, as a challenge can serve to liven up an issue, or to re-engage people in a task. You can tie these events into already-existing dates or events – like Earth Day (April 22nd every year), or America Recycles Day, (November 15th of every year). There may also be an annual event in your city that you can tie in with paper recycling.



## get help:

### Portland's Recycle At Work Team

Businesses in the Portland, Oregon metropolitan region can get a box-full of technical assistance from their government's Recycle At Work team. The team provides free, customized assistance to all types of businesses, both in-person and online.

The Recycle At Work program can identify materials for recycling, set up a program or work with custodial staff, form a Green Team to motivate a company's staff, get training and educational materials for employees, provide tips on reducing waste and buying sustainable products, and gain recognition for programs' successes. The Team also brings along specialized boxes to use for deskside recycling and central collection containers.

Similar technical assistance programs exist in San Francisco and Alameda County, California. Some can conduct waste audits for recycling program planning and LEED certification.

Check with your state/provincial and local governments to see if similar services exist in your area. For more information on Portland's team, see their [Recycle At Work website](#).

# Chapter 7:

## ENGAGING YOUR TENANTS



### GOAL OF THE CHAPTER:

**Provide information to introduce, educate, engage, and motivate your tenants to fully participate in your paper recycling program.**

Now that you have thought through the design of your new or improved program, it is time to start rolling it out to your tenants. In order to have a successful paper recycling program, you are going to need cooperation and participation. You can have the most state-of-the-art program possible, but if you don't have tenants who take advantage of the opportunity, your program won't work. So, it's important that your paper recycling program is clear, easy to use, and very accessible, and that the tenants see multiple reminders to participate throughout their day.

The good news is that surveys show most people already understand the merits of recycling and want to do their part in a recycling program. While it may

not be as easy as "If you build it, they will come"; you should be optimistic that if you do all the basic preparation and implementation, you'll have a receptive audience.

### Educational Materials

One of the first things you should consider is creating materials to post throughout the building and distribute to tenants to let them know about the program. The four basic messages would be:

1. the building or office has paper recycling
2. here's what paper products are being collected for recycling
3. here's why it is important
4. keep office paper separate



**tip:**

To make a customized poster for your office visit [PaperRecycles.org](http://PaperRecycles.org)



**tip:**

The more you can integrate your paper recycling program into existing programs, the more it becomes common knowledge to the people who work in your office or building. It becomes the way things are done, versus something new, different and potentially difficult.

### Signs

If you are making signs, make them simple, eye-catching, and to the point. For example, "Please keep office paper clean and separate!" You can also post informative signs that help reinforce the importance of recycling. For example, you could put one next to the printer that says "Did you know...One piece of copy paper can be recycled up to 12 times?" or "Did you know...recycled paper uses 44% less energy,



produces 38% less greenhouse gases, and produces 50% less wastewater than non-recycled paper?”

You can also print some statistics from your solid waste analysis if you did a waste audit, such as: “Did you know...this building throws away X pounds of paper each year? If we recycled all of it, we could save Q dollars, Y trees, Z energy...etc.” These educational signs are important, because they will help raise awareness about recycling among tenants and will promote participation.

## WHERE TO LOCATE SIGNS

- Trash Cans
- Recycling bins
- Printers/Copiers
- Conference Rooms
- Bulletin boards
- Offices, near desks

As your program develops, you may want to help reinforce the efforts to the tenants. Your hauler may be able to provide you with statistics on how much of each type of material is collected by your office. If not, you could conduct periodic waste audits to measure your program’s progress and post the results at every trashcan and recycling bin in the building. Nothing helps promote participation quite like being able to see the positive results of your actions.

## Incorporate Your Recycling Program into Everyday Office Life

As mentioned earlier, the key to a successful recycling program is keeping things clear, simple, easy and participation high. The best way to do this is by folding your recycling program into the office’s or building’s regular operation. Below are several suggestions for incorporating your recycling program into your tenant’s every day routine.

- If your office has a newsletter, see if you can put an item in it about the start of the program, any changes or updates in material collection, reminders of what needs to be collected, or spotlight departments doing an exceptional job. This could be done as often as you feel is right for your office.
- Use staff meetings as an opportunity to announce the program, note changes that are being made if any, and remind people of what is collected and how it needs to be prepared if contamination is becoming an issue. Again, this could be done as frequently or infrequently as necessary.
- Talk with your tenants’ HR departments about putting specifics of the recycling program in new hire orientations or as part of ongoing job training seminars.
- Look around your office or building -is there a community resource that everyone reads or uses that you could take advantage of?

Remember, you know best what people are paying attention to in your building or office; get creative and take advantage of what already exists.

## Set Aside Time in Your Schedule for Questions and Troubleshooting

As your building transitions from one waste collection program to a new one, there are inevitably going to be people who don’t understand the program. Moreover, as with implementing any new program, there may be kinks or issues that arise as the program starts up that need to be resolved. As your program matures, there should be fewer and fewer issues, but you need to make sure that you set aside time to identify and resolve problems that arise early in the program’s implementation. It may be tempting to assume that once you have kicked off the program, you won’t need to worry much about it. However, if you want the program to be a success, you need to build time into your schedule to ensure that things go smoothly, especially early on.

# Chapter 8:

## ENGAGING YOUR JANITORS



### GOAL OF THE CHAPTER:

Provide tips for how to best work with your janitors to help you implement a successful paper recycling program.

### Janitors: Custodians of Your Recycling Program

From the very beginning, bring your janitorial crew on as key partners in your recycling program. Their collaboration is critical to making your program successful and cost-effective. If you have a Green Team, a janitorial representative should be on it.

How do you make sure the janitors are part of your recycling team, especially when they may work at hours when you and your employees are not there? Try to schedule planning meetings at a time when the janitorial representative can attend. These meetings will both help ensure that the plans work for the custodians and also prepare the janitors who do attend to brief those that may work at night or can't attend for some other reason.

To maximize staff participation in the recycling program, you will want to create a plan that makes recycling as easy as possible for the employees/tenants. The same holds true for the janitorial team. The more that the recycling program can easily fit into their routines, the more likely it will be to succeed.

Many offices convert what had been a "trash basket" under each desk to a recycling bin, used for only

collecting recyclables. Then there are several options for how to handle the smaller amount now left over as trash:

- Use a second basket for trash, perhaps in a more general part of the office.
- Add a small, clip-on caddy to the desk-side recyclables basket, with the caddy designated for trash only.
- Remove trash baskets from the desk area entirely and require that employees take their trash to a central collection location such as a kitchen or break room. Clearly, your office layout will help determine whether or not this will work for your office.

The cleaning crew may interact with your recycling program in different ways, depending on its design:

- Some use dollies with two barrels, one for trash and one for recycling, as they make their collection rounds through the offices. This makes it easy for them to use the same cleaning routes as before and still empty the different trash and recycling baskets into the appropriate barrels. There are also single barrels with two compartments available.
- Some offices collect only recyclables one day and only dry trash another day. In that case, employees should take wet trash to a centralized area such as a kitchen so that it can be removed each day.
- Staff may take their recyclables to a centralized place and janitors may only be responsible for moving it to a collection point for pick-up by the hauler.
- Some offices don't rely on their janitors for collecting their office recycling at all, but rather have their staff deliver it to the hauler pick-up point.

## Some tips to help both staff and janitors more easily implement the program:

- Color-code both the recycling and the trash baskets so it is always clear what each is for.
- Clearly label each basket to indicate whether it is for paper/recyclables or trash. Consider whether the labels should be in additional languages.
- Use pictures on each basket of the appropriate materials to put into it and also on those to keep out.
- Wherever there is a trash basket, be sure a recycling basket is next to it so that it is easy for employees to put their discarded materials into the right collection bin.
- If your program design includes larger recycling bins in centralized locations, consult with the janitors on where those bins would best be located to maximize their efficiency.
- Make sure that larger collection bins, such as those in centralized points where smaller baskets may be emptied, have wheels so they are easier to move. Some of the larger bins available have pictures of acceptable materials molded directly into the barrel, rather than requiring stickers that can eventually wear off.
- Ask janitors to report when they find trash or recyclables in the wrong bin, and where that was, so that management can provide additional training to affected staff.
- Train both staff and each shift of janitors and follow that up with frequent refresher trainings. Also, be sure to conduct the initial training for new office and/or janitorial staff.
- If your plan requires the janitors to be minimally involved in implementing the recycling program, they will still need training to understand its goals and design. They will need to know how

to identify recycling bins even if they aren't directly responsible for them, so they know not to contaminate them with trash or mistakenly empty the recyclables into the trash.

- Post floor maps showing the locations of central recycling collection points so that both staff and janitors can refer to them.

## When training the janitorial crew:

- Provide an information sheet with details about how the program should operate in your office. This should include pictures of the types of materials that should go into the recycling baskets as well as the types of materials that should be kept out of them.
- Clarify what the janitors should do if they find recyclables in the trash or trash in the recyclables.
- Encourage the janitors to share their comments and suggestions about the recycling program and answer all of their questions. They see the results of the program every day and will have good suggestions for improving it.
- Janitors may initially contend that the recycling program means more work for them. Explain that they are still picking up the same amount of discarded materials. Assure them that the staff is responsible for separating the materials into trash and recyclables. The janitors are responsible for keeping the materials separated and delivering them to the appropriate points for more collection or pick-up.



If you can amend the janitorial contract before renegotiating, add the requirements of the recycling program. Otherwise, add it in to the next contract bid or renewal. Include in the contract the exact responsibilities and steps that you expect the janitors to take. Sample contract language is available from [StopWaste.org](http://StopWaste.org).

# Chapter 9:

## WORKING WITH HAULERS AND PAPER BROKERS



### GOAL OF THE CHAPTER:

To provide you with important tips and questions to ask when researching waste hauling companies, to help ensure that you route your paper to a high-grade deinking mill.

### Understanding Haulers

There are different kinds of haulers. Some have goals and business plans that fit your needs better than others. Paper mills rarely buy directly from a building or industrial site. Almost always, they buy from middlemen who broker the paper. Your interface will most likely be the type of business that collects the paper from your office, which may sell to one of those middlemen or be one themselves. Here's a summary of the different potential players:

**Paper Brokers** - These are businesses that specialize in picking up scrap paper from commercial accounts such as printers, offices, grocers, retail stores, and some manufacturing sites. Some are owned by or affiliated with paper manufacturers, while others are independent and sometimes family-owned operations. Brokers generally have their own paper processing facility where they sort collected paper into the right types for different kinds of paper mills. Some paper brokers (but not all) specialize in providing high-quality white paper scrap to mills that make printing and office paper and tissue products.

**Commercial Haulers** - These are collection companies that are allowed to provide services to commercial offices and business sites. Often, they only serve businesses and do not provide recycling services to residential customers. They may provide only recycling services or they may also collect commercial trash. They may have their own sorting facility or they may deliver the recyclables they collect to a processing center (called a Materials Recycling Facility, or MRF). The MRF may be owned or sponsored by a local government or owned by a business.

**Regional or National Waste Haulers** - Some companies have contracts to provide both curbside trash and recycling collection to residential customers. Increasingly, they are also taking on commercial accounts, where they are likely to collect both trash and recyclables. Frequently, they have their own recycling processing center (MRF) where they run "sort lines" to separate the collected recyclables into different materials and separate "grades" for baling and sale to markets. In some cases the local or regional government owns the MRF. In other cases, they contract with a separate company for processing, and the hauler takes their materials there.

### Choosing a Hauler

The range of hauler choices varies widely, depending on geographical location. Some cities allow only one franchised hauler to pick up commercial trash and recyclables. Other areas offer a number of haulers to choose from. Some haulers pick up only from business accounts, while others include residential curbside pick-up and businesses. Some haulers pick up both trash and recyclables, and others only the recyclables. So how do you find out the options in your location?

- Start with your local recycling office, if there is one. Often this is located in your town or county's Department of Public Works. Sometimes there is a separate Department of the Environment or similar agency.
- Check with your mayor's office for the local department that handles recycling.
- Google "recycling" and your city.
- Some telephone books identify in their information pages which government lists include a recycling office, or even provide an overview of the local recycling program, including contact information.
- Some areas handle recycling on a metropolitan scale rather than, or often in addition to, local jurisdictions.
- Most states and provinces have departments that handle recycling issues and some are very extensive. They may be in a Department of Environmental Protection, a Department of Conservation, or sometimes in the Department of Energy. Ask the state or provincial government's switchboard operator to help you locate the recycling office.
- Some locations have formed environmental committees as part of the local building managers network, and they can be a wealth of information.
- If your office is part of a business park or multi-tenant building, the building or park manager may already have access to a recycling program. If not, they may know of other tenants that are recycling. Usually, joining together into a building-wide or site-wide program will offer the best service and lower cost.
- The company that currently picks up your trash may also offer recycling services.
- Some janitorial services offer recycling.
- Look in the phone book's Yellow Pages under headings such as "Paper Brokers," "Recyclables," "Recycling," "Waste Paper," "Waste Recycling."
- In some cases, an environmental group may run a recycling program. Other local environmental groups will be able to point you in their direction.
- Check information for nearby towns and cities. Often a hauler serves an entire region and may be listed in other locations.
- If there is a recycled paper mill within 500 miles of you, especially one that makes printing and writing (office) paper, ask them which brokers in your area supply scrap materials to them.

You may be able to arrange for your paper recycling program to be organized for you by a government recycling office, your trash hauler or janitorial service. Whether you set it up yourself or have someone else do it, you will want to know the answers to the following questions.

## Interviewing Potential Haulers: Questions to Ask

1. Do they collect paper from offices in your area? This clearly narrows your list down to the companies you want to investigate further.
2. What are their markets for office paper? This is a crucial question because it tells you whether your collected material will be going to the types of paper recycling that provide the most benefits for the environment and the greatest reductions in climate change impacts. It is worth investigating in some detail.

The "highest and best use" for office paper is to be recycled back into printing and writing grade paper, both because that creates the greatest reductions in environmental impacts and because it can then be recycled again and again, with all those environmental savings each time. Next best is for your office paper to go to a tissue mill. That



uses the same processes to make pulp as making printing and office paper, resulting in the same great environmental savings, but of course tissue will not get recycled again.

High marks should go to any hauler who is able to verify that they sell their office paper to a paper manufacturer that makes printing and writing or tissue paper. Equally good is if it is sold to a “deinking mill,” which is where the pulp is made for recycled paper.

However, if their answer is vague, or they deliver to a processor or MRF and don’t know what the markets are, either follow the line back further or choose a hauler who can assure you that their paper goes to the higher grades of paper. This is most likely possible for locations in the Midwest and on the East Coast, because that is where most of the deinking pulp mills are, though there are some recycled tissue mills that deink pulp in the West.

If the hauler is vague about markets or says all the collected paper these days is going to China, find another option if possible. More than a third of scrap paper collected in the U.S. is exported, a percentage that unfortunately increased over the past decade. Office paper that is exported is most likely being used for low-grade uses, a waste of the benefits it could provide in higher grades of paper right here in North America.

- 3.** How does the hauler require you to prepare the paper? Do they fit with your building’s capabilities? Can you get a better deal if the paper is compacted and/or baled?
- 4.** If the hauler requires or favors compacting or baling, will they provide the equipment? If so, at what cost? Some haulers will provide the equipment for free or at a reduced rate if there is a long-term contract.
- 5.** Will the hauler pay for your office paper? This seems to be less common than in the past, but is still possible in some cases if you can meet their requirements. Even if they do not pay directly for the office paper, and even in cases in which you may have to pay a recycling fee, most buildings still find that they save money with a recycling program because they can lower their trash collection charges.
- 6.** What contract terms does the hauler require? What is the cost for the service, how long is the potential contract, when would you be paid or required to make a payment, and how is the payment amount determined? Will there be opportunities for changes over time, and what are those terms?
- 7.** How often will collections be made? Are there minimum quantities required? Is there room for flexibility? In some cases, the hauler may be willing to be on-call, if that fits better with your requirements. If their minimum is hard for your office to meet, consider joining with other nearby offices or buildings to create a large enough program that you can get better service and lower costs.
- 8.** Who will be responsible for providing the recycling containers to be used by office staff and the janitorial crew? Is there a cost to you? Sometimes local recycling offices will provide the containers.
- 9.** How exactly will the program work? Where do the recyclables need to be for pick-up and in what condition? Will the hauler help you set up the program?
- 10.** What quality conditions must be met for your office paper to be accepted? What are considered to be contaminants and what happens if they are present? Are you responsible for sorting out problems or will the hauler be able to do that at their processing facility? Usually, food, plastics, glass and metal containers are contaminants. Staples, paper clips, window envelopes and glossy paper are usually acceptable. If the hauler says that you can put everything into one recycling container, including recyclable plastics and beverage

containers, because they'll sort it out at the MRF, check into it further.

Take a tour of the MRF and note in particular what happens with paper from offices once it gets there. Some MRFs can properly sort the materials but most bale all the paper together, including newsprint and corrugated with the office paper. If you see that, you'll know that your paper will not be going to a high grade deinking mill, since newsprint and brown paper packaging are not accepted by them.

Do you have the option of sorting your paper yourself by keeping the office paper in separate bins? If you do that, will it definitely go to a paper mill making printing and writing paper, or will it be dumped with all the other recyclables when it gets to the MRF?

11. Will the hauler train your staff? Will they train all shifts of your janitorial crew? Do they have posters or stickers you can use, or templates to make your own?
12. Will they provide reports that show the volume of materials recycled, broken down into any categories that you may need for calculating payments, verification for certifications or grants, or other needs? How often can they provide those reports and is there a cost? Can you also get reports from their markets for high grade papers to determine whether they continue to provide high quality materials to support printing/writing and tissue mills? Will they conduct waste audits if you need those for LEED certification or other purposes? If the hauler sells their materials to a middleman and not directly to manufacturers, talk to that middleman in order to trace where your paper will go.
13. What if you are dissatisfied with the service? Can you cancel or amend the contract for cause without repercussions?
14. Ask for references, both from other customers and also from the hauler's paper markets, especially if you are considering choosing them because of their markets.

15. Ask to see their license to do business as a commercial broker or hauler. Check local and state government records to make sure they have not been found to be out of compliance. Verify worker's compensation, public liability and property damage insurance.

Overall, make your choice based on getting the best environmental markets you can, balanced by your other needs for the program's configuration. Collecting your office paper will help the recycling system, no matter what, and it will keep it from a one-way trip to a landfill or incinerator.

### SOME GUIDES THAT INCLUDE VERY HELPFUL MATERIAL:

- Ryzex's guide, [How To Implement a Recycling Policy and Begin the Journey Towards "Zero Waste,"](#) includes an excellent form for interviewing and comparing haulers (p. 7).
- The U.S. Environmental Protection Agency's guide, [Business Guide for Reducing Solid Waste,](#) includes a good list of questions to ask potential haulers (p. 19).
- The California Integrated Waste Management Board provides [sample language](#) for a contract between a business and a hauler.

# Chapter 10:

## SHREDDING YOUR PAPER ONLY WHEN NECESSARY



### GOAL OF THE CHAPTER:

Outline how shredding paper can harm your recycling program, and to provide tips for shredding that better meet the needs of the recycled paper industry.

Shredding has become a standard practice in almost every office these days, mostly due to privacy legislation that requires sensitive documents be destroyed, i.e. – shredded. However, often non-sensitive documents also end up being shredded for sake of ease and lack of awareness.

Shredding office paper is a practice that destroys the fibers within the paper, making it difficult to recycle and manufacture new office paper with the shredded fiber. The reason is that shredding cuts the fibers shorter, which makes them weaker, and renders them inefficient for the higher grades of paper. The longer the paper fiber, the higher the grade of paper it can manufacture. Also, the longer the fiber, the more often it can be recycled. (High grade office paper can be recycled up to 8-12 times!) Therefore, most shredded paper must be down-cycled into a lower grade of paper product, such as packaging, although some tissue mills can also handle shredded paper. Shredded paper is rarely accepted by high-grade recycled paper mills, due to the weakened structure of the fibers, as well as the higher degree of contamination.

For instance, as paper is sorted at a Material

Recovery Facility, debris and contamination is ideally discovered and easily removed from the white office paper sorting process. When sorting shredded office paper, debris like bits of shredded plastic or film can hide within the shreds giving the end product a high chance of contamination. Also, the paper shreds can fall through the sorting screen, which means it goes directly to the landfill so is lost from recycling forever.

Shredded office paper threatens your paper recycling program in many ways; the following are tips for minimizing these threats.

1. Only shred the documents that are absolutely necessary. Keep shredding to a minimum.
2. Keep your shredded office paper out of your recovered white paper containers. Instead, put the shredded paper with your packaging and cardboard containers.
3. For the documents you must shred, set your shredding machine on the largest cut possible – small enough to destroy confidential information, but large enough to keep some fibers intact.
4. Avoid using cross-hatching for your shredding style. This destroys the majority of the paper fibers.
5. If you are using an out of house shredding company, educate them to your needs and wishes as well. Make sure they set their shredding equipment at the largest cut possible.
6. Talk to your hauler to learn how they recycle the shredded paper. Make sure they are not contaminating your recovered office paper with shredded paper once it leaves your building.

(Source: Eco-cycle website – [www.eco-cycle.org](http://www.eco-cycle.org))



# PART THREE

## RESOURCES AND TIPS ON PAPER RECYCLING

### Chapter 11:

**GOAL OF SECTION:**  
PROVIDE FURTHER INFORMATION,  
IDEAS AND RESOURCES TO PROMOTE  
OFFICE PAPER RECYCLING IN YOUR  
CITY AND REGION.

## NETWORKING WITHIN YOUR CITY AND REGION



### GOAL OF THE CHAPTER:

Encourage you to become part of a movement  
for office paper recycling within your city.

As an office manager, you want your paper recycling system to best meet the needs of the recycled paper manufacturing industry. You want to be acknowledged for doing a good thing. You want to attract good tenants to your building. You want support and resources to help you do it better. The following information is provided to help you start thinking about networking in your city and region to best position you to accomplish all of these goals.

### Promoting Your Recycling Program to Your City

You want your building to be seen as green, sustainable, and a healthy place to spend time.

### TIPS FOR WORKING WITH YOUR CITY OR REGIONAL ENVIRONMENTAL/ SUSTAINABILITY OFFICES

**Develop a relationship** – pick up the phone and call the key people working on environmental or sustainability issues in your city offices, or regional networks. Call them every month just to check in and build a relationship.

**Keep them informed** – send press releases, or important ‘green’ business announcements to the key people in your city and region. Make sure you stay on their radar screen as an important building doing successful recycling.

**Invite them to your building** – you want to show off your paper recycling program to as many people as possible. Invite them to your building so they can see first-hand what a good paper recycling program looks like. You can also then make pleas for greater resources granted to commercial recycling.

**Network with other buildings promoting office paper recycling** – there is power in numbers. Find other buildings that are also setting up or running paper recycling programs. Call a meeting with key municipal and regional staff who can help to improve your program, and promote your buildings.

Once your paper recycling goals are established, you can then estimate how much less waste will be landfilled, how much less carbon you will be emitting, how many less trees you will be cutting down, and how many more jobs you will be supporting. These issues are all very important and relevant to most municipalities - especially the jobs and decreased waste numbers.

## Meet Your City Council Member

While it is important to be talking with your city's recycling or sustainability coordinator, they alone do not have much power to make changes. They are hired to implement programs or ideas that are approved by the city council. Therefore, it is invaluable for you to meet your city council member. She or he will be interested in hearing your needs as a manager of an important office or building in their district.

Take the time to educate your city council member on your paper recycling program. Tell them how it works, and how it could work better. Let them know if you need resources to better your program. It is through education and understanding that we can

make improvements to our citywide recycling systems.

The tips that were provided above serve for engaging your city council member, as well.

## Join a Professional Office Association

BOMA (Building and Office Managers Association), for instance, has regional organizations. BOMA is committed to creating healthy and sustainable office buildings. By joining and networking with an important and respected organization, you will find that you may have added resources available to support your office recycling program. You will have people you can talk with to brainstorm, or troubleshoot various challenges. And you will have an organization to speak for your needs when it comes to seeking further support or resources.

## Join a "Green" Network

Often times, cities will have 'green' events, or networks that you can be part of. Networks are helpful in learning more about a particular issue, as well as identifying resources and help for your situation.

### REGIONAL ENVIRONMENTAL COMMITTEES: BOMA-SF

You shouldn't have to set up your program from scratch by yourself. In fact, in some parts of the country, you're in good company. The Building Owners and Managers Association (BOMA) has regional and local chapters all over the U.S. and Canada, and some of them have established Environment Committees to help building manager members achieve a wide range of sustainability goals.

BOMA San Francisco's Environment Committee holds meetings each month that are regularly attended by 50 or more participants, with another 70 or so on an active e-mail roster. About 30% of the participants are building managers. The

other 70% are from local governments, janitorial services, trash/recycling haulers, product vendors, utilities and other allied businesses. Their reports also reach the larger membership of several hundred.

Each month, the Committee's luncheon meeting is built around evaluating green program applications and preparing for their annual EARTH Awards, which give cash awards to the best entries in several categories for innovative and effective sustainability programs. Along the way, the membership shares information, networks on green issues, and helps solve problems.

Zachary Brown, manager for a local building and Chair of the committee, says, "I think this is the perfect place for building managers to get help on designing a recycling program. That's how I got here. I wanted to do better at recycling in my own building, so I went

to an Environment Committee meeting and asked for help. Immediately, I got lots of suggestions and assistance from attendees with many different kinds of expertise." Now he sees all the best ideas and programs and books presentations from a wide variety of experts on green issues that can benefit the membership.

If your area doesn't have a similar kind of environmental building network, why not start one? One of the rewards, according to Zachary, is the ability to forge relationships with vendors and government officials that are outside the dynamics of contracting, sales and politics. It's one of those win-win situations, with the environment as the biggest winner.

See BOMA-SF's website for more information on their [Environment Committee](#).

# Chapter 12:

## REIMAGINING PAPER IN THE 21ST CENTURY



### GOAL OF THE CHAPTER:

Familiarize you with the current state of paper recycling in the United States and the needs of recycled paper manufacturing, and better explain the reasons for specific requirements of office paper recycling programs.

After more than 30 years of recycled-paper market development, recycled content has reached the dizzying height of 6% of the overall fiber that goes into printing and writing papers. Yes, just 6% – and only half of that is post-consumer. Put another way, more than 90% of the printing and office paper available in North America still has no recycled content at all. How can that be possible, you might ask, given that so many major purchasers are increasingly specifying 100% recycled papers? Clearly, that 6% is particularly concentrated in a small subset of the printing and writing grades, especially office/copy paper and text/cover, where it may now have achieved a 10% market share.

While the U.S. paper industry reports that recycled content overall makes up about one-third of its fiber, much of this fiber is used in high-recycled content products, such as cereal boxes and commercial janitorial tissue products. These are great recycled products, but they cannot substitute for the lack of recycled content in printing and writing papers, most

of which are made by the most environmentally-demanding papermaking process. The greatest environmental benefits – reducing climate change gases, conserving forests, reducing energy and water use, cutting pollution and solid waste – are delivered by converting more printing and writing papers to recycled content.

In the past, government purchasers, environmentalists and major corporate paper buyers collaborated to drive up recycled content and stimulate the development of more recycled papers by specifying higher post-consumer minimums. But that strategy is no longer sufficient because – and this is both the good news and the bad news – we are close to the limits of the current capacity for producing the deinked pulp necessary for making recycled paper. The few deinking mills left are now running near maximum capacity, meaning that increases in recycled content will require investments in new capacity or expansions of existing capacity.

Given that North America is the primary source of recovered paper, and that a vast amount of office paper is still uncollected and uncommitted, environmental benefits then soar by adding recycled fiber to printing and office papers.

The issue is complex. Increasing recycled paper production requires strengthening the recycling system's conceptual framework, along with even more aggressive recovered paper collection and improved quality, new investments in parts of the industry that paper companies have increasingly abandoned, and more extensive and reliable commitments to purchase recycled paper products on the part of large paper users.

The role of office and building managers in this system is therefore, especially important. We need

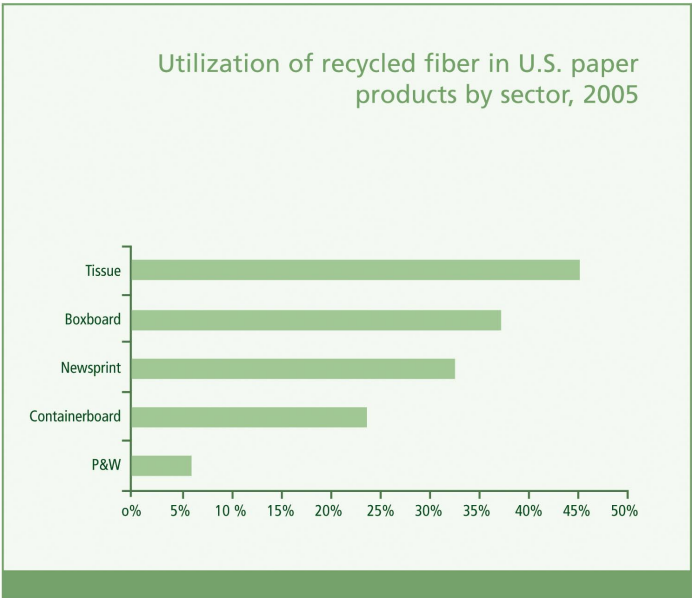
office managers across North America to set up effective paper recycling programs, which entails collecting all the office paper after it's used, keeping it separate and clean, and ensuring that this paper, once it leaves your office, is on its way to a high-grade deinking mill that will then create the recycled fiber needed to manufacture a higher content recycled office paper.

The RePaper Project is catalyzing collaborative partnerships for this revitalization through stimulating increased office paper recovery, as well as increased industrial capacity for producing recycled-content paper. We not only need the help and support of office managers, but also governments at all levels, as well as the active engagement of collectors and processors to better focus the recycling system on recapturing materials suitable for domestic paper manufacturing.

Expanding capacity to make recycled papers, especially in the current economic climate, will require long-term thinking and strategic coordination at all levels. Without new sources of high-quality recovered fiber, additional capacity is not feasible. However, a concerted effort by communities all across the nation to collect all office paper and produce clean bales would provide these new sources. In some regions, they could even be directly and specifically committed to supporting local paper mills. Paper purchasers will have to maintain and increase their commitment to buying recycled papers even when the supply is tight, in order to drive conversion to more sustainable paper production processes.

Rethinking, rebuilding and revitalizing the recycling and paper production systems in the U.S. and Canada would create good green jobs in the industry, strengthen communities, provide high-quality paper products transported primarily within regions, significantly reduce the production footprint for paper, and create the production model needed for a more sustainable world in the 21st century.

Appropriate recycling options vary according to geographic regions, climate, demographics, size and type of collection program, political structure



Sources: RISI 2006 and AF&PA 2005.

and available markets. But more collaboration between recycling sectors and greater agreement on the system's policies and conceptual framework that drives the system could tie the collection programs more faithfully to the production processes, thus creating more reliable and comprehensive recycling. Achieving this may be just the key to building, once again, a thriving paper industry renewal on recycled content. As an office manager, you are a very important piece to this complex puzzle.

# Chapter 13:

## ABOUT THE REPAPER PROJECT



### GOAL OF THE CHAPTER:

To make office and building managers aware of the RePaper Project so that we become a helpful resource for paper recycling.

With climate catastrophes looming, along with an unstable global economy, the time is now to make systemic changes that route us down a more sustainable, and climate-friendly path. Paper production as a whole in North America is a system of processes that could either be helpful to the planet and the population, or quite harmful. To date, unfortunately, it has been harmful. The RePaper Project, however, sees a growing opportunity to make changes within the paper industry that not only protects our fragile planetary ecosystems, but also creates social conditions that spur technological innovations and creates sustainable job markets.

The Project has defined seven Guiding Principles that drive our programs to create an earth and people-friendly paper industry:

1. Transition the recycling collection system from a “trash-based” management system to a resource management system.
2. Maximize fiber recovery.
3. Maximize fiber quality during the entire recovery and recycling process.

4. Maximize recycled paper production capacity.
5. Create a climate-friendly paper industry.
6. Revitalize a thriving, environmentally-sustainable paper industry in North America.
7. Rebalance the recycling system to better meet manufacturing needs.

Fiber supply, manufacturing capacity, and recycled paper demand are the three foundational structures that contribute to the health of the recycled paper industry and therefore drive the work of the RePaper Project. All three areas must be strong, equal, and stable in order to create a sustainable recycled paper industry for the long-term.

The Project catalyzes collaborative projects to increase fiber recovery as well as increase industrial capacity for producing recycled content paper.

### THE PRIORITY OBJECTIVES OF THE REPAPER PROJECT ARE:

1. Increase office paper recovery rate from 50% to 75% by 2015.
2. Increase post consumer recycled content in printing and writing papers from 6% to 15% by 2015, and 30% by 2020.
3. Increase awareness of the many positive virtues of recycled content printing and writing papers.



Please visit [The RePaper Project](#) to learn more about our work.

# Chapter 14:

## NOTES AND RESOURCES



### GOAL OF THE CHAPTER:

Provide sources of information and hyperlinks to websites and resources that educate readers on paper issues, recycling issues, and office management issues.

## NOTES

### PAGE

#### Summary – Join the Effort to Improve North America’s Paper Recycling

- 3** “50% office paper is recovered for recycling” – AF&PA ([www.paperrecycles.org](http://www.paperrecycles.org)) – 2006 Annual Recovered Paper Statistics
- 3** “...methane, a climate warming gas 25 times more harmful than carbon dioxide”... - Environmental Paper Network ([www.environmentalpaper.org](http://www.environmentalpaper.org)) Climate Neutrality Paper: Fact or Fiction
- 3** “...US municipal landfills are composed of over one-quarter paper”... - U.S. EPA (<http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf>) Municipal solid waste in the United States: 2007 facts and figures.
- 3** “Recycled paper industry creates 5 times as many jobs as the virgin paper industry”... - World Centric (<http://worldcentric.org/biocompostables/paper>)
- 4** “Printing and Writing papers only contain an average of 6% recycled content”... - Environmental Paper Network ([www.environmentalpaper.org](http://www.environmentalpaper.org)) – The State of the Paper Industry: Monitoring the Indicators of Environmental Performance
- 4** Deinking Mill explanation – A deinking mill is where recovered fiber is turned into clean recycled fiber for the use in manufacturing recycled paper. A high-gradedeinking mill deinks Printing and Writing grades of paper.
- 4** Deinking explanation – The process by which ink is lifted off used paper, which is then broken back down into fibers to be recycled into new paper. ([www.Conservatree.org](http://www.Conservatree.org))



- 4 Office Paper explanation – High grade papers such as copier paper, computer printout, and stationary almost entirely made of uncoated chemical pulp. Such paper is also generated in homes, schools, and elsewhere, along with offices. ([www.frtr.gov](http://www.frtr.gov))
- 4 Printing and Writing Paper explanation – Suitable for printing, copying, and business purposes, writing, sketching, drawing, etc. except newsprint. ([www.fao.org](http://www.fao.org))

### Introduction – Office Paper is a Valuable Resource

- 5 “Over one-quarter of the waste in municipal landfills is paper...” –U.S. EPA (<http://www.epa.gov/epawaste/nonhaz/municipal/pubs/msw07-rpt.pdf>) Municipal solid waste in the United States: 2007 facts and figures.
- 5 “...methane, a climate warming gas that is 25 times more powerful than CO<sub>2</sub>.” Environmental Paper Network ([www.environmentalpaper.org](http://www.environmentalpaper.org)) Climate Neutrality Paper: Fact or Fiction
- 5 “Manufacturing recycled paper uses 44% less energy...” Environmental Paper Network ([www.environmentalpaper.org](http://www.environmentalpaper.org)) – The State of the Paper Industry: Monitoring the Indicators of Environmental Performance

### Chapter 7: Engaging your Tenants

- 16 “...copy paper can be recycled up to 12 times.” - Conservatree ([www.conservatree.com/paper/Choose/Dream.shtml](http://www.conservatree.com/paper/Choose/Dream.shtml))
- 16 “recycled paper uses 44% less energy, produces 38% less greenhouse gases, and produces 50% less wastewater...” - Environmental Paper Network ([www.environmentalpaper.org](http://www.environmentalpaper.org)) – The State of the Paper Industry: Monitoring the Indicators of Environmental Performance

### Chapter 12: Reimagining Paper in the 21st Century

- 27 “...recycled fiber has reached a dizzying height of 6% of overall fiber that goes into printing and writing papers.” - Environmental Paper Network ([www.environmentalpaper.org](http://www.environmentalpaper.org)) – The State of the Paper Industry: Monitoring the Indicators of Environmental Performance
- 27 “...have achieved a 10% market share.” – Conservatree ([www.conservatree.com/paper/Choose/Dream.shtml](http://www.conservatree.com/paper/Choose/Dream.shtml))
- 27 “...recycled content overall makes up about one-third of its fiber...” – American Forest & Paper Industry ([www.afandpa.org](http://www.afandpa.org))

## RESOURCES

### AF&PA – American Forest and Paper Association:

The PaperRecycles website has interesting statistics on paper recovery, case studies on paper recycling programs, tips and signs on office paper recycling, and information on the paper manufacturing industry.

<http://www.paperrecycles.org>

### “A Guide To Recycling At Work”

Make a customized poster

[http://www.paperrecycles.com/workplace\\_recycling/dynamicposter/index.html](http://www.paperrecycles.com/workplace_recycling/dynamicposter/index.html)

### **"Between the Sheets: Taking the Wrinkles Out of Paper Recycling," by Joel Makower**

Joel Makower is the founder of GreenBiz.com, which includes an online newsletter about corporate environmental strategies.

<http://environment.about.com/od/recycling/a/officpaper.htm>

### **BOMA – Building and Office Managers Association:**

The BOMA site has links to regional BOMA offices and websites, that can be a resource to all office and building managers.

<http://boma.org>

### **BOMA-SF Environmental Committee**

<http://bomasf.web2.rs.autoupdate.com/committeeview.php?idx=11>

### **California Integrated Waste Management Board: Sample contract between a business and a recycling hauler**

<http://www.ciwmb.ca.gov/wpie/Recycle/SmplBusBus.pdf>

### **Conservatree:**

Conservatree is a valuable website to learn more about recycled paper on the market, as well as best practices in recovering paper for manufacturing.

<http://conservatree.org>

### **Eco-Cycle:**

The Eco-Cycle site has lots of information on workplace recycling, as well as information on composting programs, and the new movement toward "zero-waste".

<http://ecocycle.org>

### **EPA – Environmental Protection Agency: Business guide for reducing solid waste**

<http://www.epa.gov/epawaste/nonhaz/municipal/index.htm>

### **EPN – Environmental Paper Network:**

The EPN site is valuable for learning more about environmental challenges associated with the pulp and paper industry with resources to help purchase environmental papers.

[www.environmentalpaper.org](http://www.environmentalpaper.org)

### **Government of Barbados:**

This website is straightforward, fun, and informative. It has waste audit information that is easy to understand and use, plus other tips to greening the office.

<http://www.solid.gov.bb/Resources/Brochures/Greening/index.asp>

### **GRRN – Grass Roots Recycling Network:**

GRRN houses a really interesting email list serve called Green Yes. From this list you can learn about many sustainable issues for your office, along with recycling.

<http://www.grrn.org>



### Honolulu ENV:

This is a website that addresses the “sweet and simple” of office paper recycling for Honolulu offices. However, the information could be helpful in many cases outside of Hawaii.

[http://www.opala.org/solid\\_waste/office\\_paper\\_recycling.html](http://www.opala.org/solid_waste/office_paper_recycling.html)

### “How To Implement A Recycling Policy and Begin the Journey Towards Zero Waste”, by Ryzex

This document includes a table for evaluating haulers, but talks mostly about implementing Zero Waste policies.

<http://sustainableconnections.org/bizdev/tzw/Toward Zero Waste Recycling Handbook.pdf>

### Kentucky Recycling Market Assistance Program

“Office Paper Recycling Guide” - Includes sample memos for notifying and educating staff about the recycling program, as well as pointers for working with janitors.

<http://waste.ky.gov>

### NRDC – Natural Resources Defense Council:

The NRDC site has good information listed about reducing paper use in offices.

<http://www.nrdc.org/enterprise/greeningadvisor/pa-reducing.asp>

### “Office Paper Recycling Guide”

National Office Paper Recycling Project, U.S. Conference of Mayors, 1997

<http://www.waste.ky.gov/NR/rdonlyres/7F628881-8058-445B-B20C-9FF522993B1C/0/21207OfficePaperGuide.pdf>

<http://www.p2pays.org/ref/04/03208.pdf>

### RecycleatWork

The Recycle at Work program is a partnership between Metro and local governments throughout the Portland Oregon metropolitan area.

<http://www.Recycleatwork.com>

### “Recycling At Work: Working With Janitorial Service Companies”

[http://www.stopwaste.org/docs/janitorial\\_services\\_tips\\_contract\\_language.pdf](http://www.stopwaste.org/docs/janitorial_services_tips_contract_language.pdf)

### Seattle, Washington Solid Waste website:

King County in Washington State is a leader in promoting recycling, providing resources, and reducing waste. This website offers helpful tips and advice, and explanations of successful programs.

<http://your.kingcounty.gov/solidwaste/index.asp>

### Stop Waste:

Stop Waste website is a wonderful resource for people interested in recycling, and learning more about what they can be doing to implement and advance recycling in their area.

<http://www.stopwaste.org>

### The Story of Stuff:

The Story of Stuff is a short, powerful documentary describing the cycle of waste and over-consumption that relates to anyone interested in improving their recycling program.

<http://www.storyofstuff.com>

### Waste Wise Program

Frequently Asked Questions about paper recycling

<http://www.epa.gov/epa-waste/partnerships/wastewise/index.htm>

### WITH SPECIAL THANKS TO:

KENT FOERSTER, U.S. EPA, OFFICE OF RESOURCE CONSERVATION AND RECOVERY,  
KAREN PENAFIEL AND JAMES COX, BOMA INTERNATIONAL, FOR THEIR PARTNERSHIP  
WITH THE REPAPER PROJECT AND ASSISTANCE WITH COMPILING THIS GUIDE AND  
SUSAN KINSELLA OF CONSERVATREE FOR SPECIAL REVIEW

